

Abstract of the Disclosure

[0035] Two types of contention channels are used to accommodate broadband packet data in a satellite communication network. A first contention channel is used by unsynchronized user terminals to access the system and request a traffic channel. The first contention channel is of a sufficient duration to accommodate a RACH message, as well as the timing uncertainty between user terminals within a given spot beam. A second contention channel is shorter in duration than the first contention channel, and is narrowband, so that more than one second contention channel may be transmitted within the bandwidth of the broadband traffic channels. The second contention channels are used by synchronized user terminals for transmitting packet RACH, or PRACH, messages. The more efficient nature of the PRACH channels accommodates the increased overhead associated with bursty packet data, without the capacity cost of the longer duration RACH channel.

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